Application Number 10/614,457 Response and Amendment dated April 8, 2005 Attorney Docket Number 011403-9001-01

Amendments to the Drawings

Entry of new FIGS. 11a, 11b, and 12a (on the enclosed drawing sheets of the present application) is respectfully requested.

REMARKS

This Response and Amendment is filed in reply to the Office Action dated October 8, 2005, and is further to the January 25, 2005 Examiner's Interview between the Examiner and the undersigned Applicant's Representative. By this Amendment, claims 1, 5, 7, 9, 11, 19, 25, 31, 33-38, 41-48 are amended, and claims 4, 6, 14, 32, 39, and 40 are canceled, leaving claims 2, 3, 8, 10, 12, 13, 15-18, 20-24, 26-30, and 49-52 unchanged.

On pages 2 and 3 of the Office Action, the drawings of the present application are objected to under 37 C.F.R. §1.83(a) as failing to show every feature of the invention specified in the claims. In the January 25, 2005 Examiner's Interview, the deformable visible indicator claimed in claims 19 and 25 was discussed. In particular, the Applicant's Representative noted that an example of such an indicator is illustrated in FIGS. 2-4, 12, and 13 of the drawings as originally filed, is given reference number 72, and is described on pages 16 and 17 of the present application. The Applicant's Representative noted to the Examiner that the deformable nature of the visible indicator 72 illustrated in FIGS. 2-4, 12, and 13 does not readily lend itself to illustration because this characteristic is a material property, and suggested that another figure showing a deformed visible indicator 72 could be added to the figures of the present application, if necessary. However, the Examiner stated that this would not be necessary, and that the deformable nature of the visible indicator need only be noted in this Response and Amendment.

Also in the January 25, 2005 Examiner's Interview, the separate first and second body portions (claimed, for example, in claim 22) were also discussed. The Examiner indicated that an exploded view showing the first and second body portions as separate elements could be added to the figures in order to overcome this drawing objection. Accordingly, the Applicant submits new FIG. 12A (enclosed) on a new sheet of drawings containing originally-filed FIGS. 12-14. New FIG. 12A illustrates two body portions of the housing as requested by the Examiner.

The crimp subject matter (claimed, for example, in claims 20, 21, and 27) was also discussed in the January 25, 2005 Examiner's Interview. The Applicant's Representative noted that such a feature is shown in FIGS. 2, 3, and 13 of the originally-filed drawings, insofar as such figures show a cable 36 retained within a body portion 64 of the housing 44 that has been crimped (e.g., deformed sufficiently in the illustrated embodiments to retain the cable 36). The Applicant's Representative also requested suggestions from the Examiner regarding what additional drawing information would be needed to illustrate that the body portion 64 of the housing 44 is crimped upon the cable 36. The Examiner responded by stating that further illustration would not be necessary, and that the crimped state of the body portion 64 needs only to be noted in this Response and Amendment.

Also in the January 25, 2005 Examiner's Interview, the pin-type and plate-type grips were discussed. The Examiner indicated that two additional views showing these types of grips could be added to the figures in order to overcome this drawing objection. Accordingly, the Applicant submits new FIGS. 11A and 11B (enclosed) on a new sheet of drawings in order to illustrate pin-type grips (FIG. 11B) and plate-type grips (FIG. 11A).

Accordingly, the Applicant respectfully submits that the drawing objections to the present application are hereby overcome. Withdrawal of the drawing objections is therefore respectfully requested.

On pages 3 and 4 of the Office Action, the specification is objected to based upon use of the phrase "the present invention" in the Abstract and mis-numberings on page 7, line 2 and on page 9, line 31 of the present application. The Applicant hereby amends the specification to address the objections thereto. Accordingly, withdrawal of the specification objections is respectfully requested.

On page 4 of the Office Action, claims 31, 33, and 47 are objected to based upon informalities identified by the Examiner. The Applicant hereby amends claims 31, 33, and 47 as suggested by the Examiner. Accordingly, withdrawal of the objections to claims 31, 33, and 47 is respectfully requested.

On pages 10-13 of the Office Action, claims 1-5, 8, 11-15, and 18 are rejected under 35 U.S.C. §102(e) as being anticipated by United States Patent Number 6,550,830 issued to Kueznel. Also, on pages 13 and 14 of the Office action, claims 1-5, 8, 11-15, and 18 are rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent Number 3,994,521 issued to Van Gompel in view of Kueznel. Further, on pages 14 and 15 of the Office Action, claims 1-5, 8, 11-15, and 18 are rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent Number 5,352,003 issued to Bystry. However, on page 16 of the Office Action, claims 6, 7, 9, 10, 16, and 17 are indicated as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 5 is hereby rewritten in independent form, and includes all of the limitations of claim 6 (indicated as being allowable by the Examiner) and claim 1. Claims 7 and 9 are each also rewritten in independent form to include all of the limitations of claim 1. Accordingly, amended claims 5, 7, and 9 are allowable.

Claim 1 is hereby amended, and calls for, among other things:

A cable lock, comprising:

a cable having a cross-sectional shape, the cross-sectional shape of the cable having a radius varying at different circumferential positions of the cross-sectional shape;

a housing defining an internal cavity therein; and

a wall positioned to block access into the cavity of the housing, the wall having an aperture defined therethrough, the aperture having a shape and having a radius varying at different circumferential positions of the aperture, at least a portion of the cross-sectional shape of the cable having a shape complementary to the shape of the aperture to inhibit ingress of an object into the internal cavity of the housing between the cable and the wall, wherein the wall is rotatable with respect to the housing in insertion of the cable through the aperture.

Claim 11 is also hereby amended, and calls for, among other things:

A method of locking a cable lock, the method comprising:

inserting an end of a cable into and through an aperture of a wall, the cable
having a cross-sectional shape with a radius varying at different
circumferential positions of the cable, the aperture having a crosssectional shape with a radius varying at different circumferential positions
of the aperture, the cable and aperture having complementary shapes;
inserting the end of the cable into and through a housing in a first direction;
rotating the wall with respect to the housing;
preventing movement of the cable through the housing in a second
direction substantially opposite the first direction; and
blocking ingress of objects into the housing along a surface of the cable
through the aperture by the complementary shapes of the cable and
aperture.

As described in greater detail in the present application as originally filed, some embodiments of the present invention provide a cable lock and method of locking a cable lock in which a wall rotatable with respect to a housing has an aperture complementary to a cable, and in which the aperture has a radius varying at different circumferential positions of the aperture to block or inhibit ingress of objects into the housing.

In contrast, although Kueznel, Van Gompel, and Bystry each have a member through which a cable or bolt passes, none of these references teach, describe, or suggest a rotatable relationship between the member and the cable or bolt. The cap 74 of Kueznel identified by the Examiner is not shaped to rotate with respect to the housing 44. With regard to this and the other seal embodiments disclosed by Kueznel, there is no indication or suggestion regarding a rotatable relationship as claimed in amended claims 1 and 11. As discussed with the Examiner in the January 25, 2005 Examiner's Interview, Kueznel is relevant to amended claims 1 and 11 only for what it teaches. However, Kueznel is entirely silent regarding the relationship between the cap 74 (or other similar elements disclosed by Kueznel) and the housing 44, and fails to even suggest the desirability of a rotatable relationship between the cap 74 and the housing 44.

Similarly, Van Gompel is silent regarding the relationship between the retaining wall 44 and the body member 26 identified by the Examiner. Also, Bystry is silent regarding the relationship between the washer 46 and the body portion 12 identified by the Examiner. Neither Van Gompel nor Bystry provide any indication or suggestion regarding a rotatable relationship as claimed in amended claims 1 and 11. As also discussed with the Examiner in the January 25, 2005 Examiner's Interview, Van Gompel and Bystry both fail even to suggest the desirability of a rotatable relationship between the element identified by the Examiner.

Therefore, in contrast to the Examiner's statements that each of the Kueznel, Van Gompel, and Bystry devices disclose a wall rotatable with respect to a housing, the Applicant respectfully submits that none of the elements in Kueznel, Van Gompel, and Bystry compared by the Examiner to the wall claimed in claims 1 and 11 are disclosed as being rotatable. Furthermore, Kueznel, Van Gompel, and Bystry - alone or in any combination - fail to suggest such a relationship between elements.

Accordingly, and for other reasons not discussed herein, the Applicant respectfully requests withdrawal of the 35 U.S.C. §102(e) and §103(a) rejections of amended claims 1 and 11. Claims 2, 3, 8, and 10, and claims 12, 13, and 15-18 are each ultimately dependent upon amended claims 1 and 11, respectively, and are allowable based upon amended claims 1 and 11 and upon other features and elements claimed in claims 2, 3, 8, 10, 12, 13, and 15-18 but not discussed herein.

On pages 4-7 of the Office Action, claims 19-21 and 23-30 are rejected under 35 U.S.C. §102(b) as being anticipated by Bystry. Also, on pages 7-10 of the Office Action, claims 19-30 are rejected under 35 U.S.C. §102(b) as being anticipated by Van Gompel.

Claim 19 is hereby amended, and calls for, among other things:

A cable lock, comprising:

a body having

a first portion defining a housing having an internal cavity; and a second portion having an aperture therethrough, a visible indicator thereon, and an exterior surface, the visible indicator deformable under force applied to the second portion and being in at least one of a raised position and a recessed position with respect to the exterior surface of the second portion of the housing immediately adjacent the visible indicator; and retained within the aperture in the second portion of the body.

a cable retained within the aperture in the second portion of the body, the cable having an end insertable into the internal cavity of the housing to lock the cable lock.

Claim 25 is also hereby amended, and calls for, among other things:

A method of assembling a cable lock, comprising:

providing a body having a first portion defining a housing and a second portion having an exterior surface;

forming a visible indicator upon the second portion of a body, the visible indicator deformable under force applied to the second portion of the body and being in at least one of a raised position and a recessed position with respect to the exterior surface of the second portion of the housing immediately adjacent the visible indicator;

inserting a cable into an aperture in the second portion of the body; and securing the cable within the aperture in the second portion of the body.

As described in greater detail in the present application as originally filed, some embodiments of the present invention provide a cable lock and a method of assembling a cable lock in which a body has first portion (having an internal cavity or defining a housing) and a second portion having a visible indicator deformable under force applied to the second portion, wherein the visible indicator is raised or recessed with respect to the immediately adjacent exterior surface of the body.

In contrast, Bystry has a body member 13 and extension 12 having entirely featureless exterior surfaces. As discussed with the Examiner in the January 25, 2005 Examiner's Interview, Bystry fails to teach, describe, or suggest the use of any visible indicators that are raised or recessed with respect to immediately adjacent exterior surfaces of the Bystry locking

device 10, and that are deformable under force applied to the extension 12 of the locking device 10 (compared by the Examiner to the second portion of the body claimed in claims 19 and 25). Similarly, although Van Gompel discloses a member 24 and shell 26, and discloses different possible shapes of the member 24 (see FIGS. 7-9 of Van Gompel), the member 24 and shell 26 have exterior surfaces that are entirely featureless. Van Gompel also discloses a second embodiment of a case lock having a body 48, 49 with exterior surfaces that are entirely featureless. In this regard, the portion 51 of the case lock illustrated in FIG. 6 of Van Gompel is described as being a "flat portion" enabling the attachment of a seal identifier of unknown type. Van Gompel, column 4, lines 53-57. As also discussed with the Examiner in the January 25, 2005 Examiner's Interview, Van Gompel fails to teach, describe, or suggest the use of any visible indicators that are raised or recessed with respect to immediately adjacent exterior surfaces of the Van Gompel cable lock, and that are deformable under force applied to the member 24, shell 26, or body 48, 49.

Furthermore, neither Bystry, nor Van Gompel, nor their combination suggest the desirability of a raised or recessed and deformable visible indicator located as claimed in amended claims 19 and 25 of the present application.

Accordingly, and for other reasons not discussed herein, the Applicant respectfully requests withdrawal of the 35 U.S.C. §102(b) rejections of amended claims 19 and 25. Claims 20-24 and 26-30 are each dependent upon independent claims 19 and 25, respectively, and are allowable based upon amended claims 19 and 25 and upon other features and elements claimed in claims 20-24 and 26-30 but not discussed herein.

On pages 4-7 of the Office Action, claims 31-52 are rejected under 35 U.S.C. §102(b) as being anticipated by Bystry. Also, on pages 7-10 of the Office Action, claims 31-52 are rejected under 35 U.S.C. §102(b) as being anticipated by Van Gompel. In addition, on pages 10-13 of the Office Action, claims 31-34, 37-48, and 51 are rejected under 35 U.S.C. §102(e) as being anticipated by Kueznel.

Claim 31 is hereby amended, and calls for, among other things:

A cable lock, comprising:

a first housing;

a second housing rotatable within and with respect to the first housing;

a grip at least partially located within the second housing; and

a cable insertable in a first direction into a passage within at least one of the first and second housings, the cable having a locked state in which the cable is movable with respect to the second housing in the first direction but is restrained against movement with respect to the second housing in a second direction substantially opposite the first direction, and an unlocked state:

wherein the cable is rotatable relative to the first housing when in the locked state; and

wherein the grip is movable to permit the cable to move in the first direction, is engageable with the cable to restrain the cable from moving in the second direction, and is movable about the passage in the unlocked state of the cable.

Claim 45 is also hereby amended, and calls for, among other things:

A method of locking a cable lock, the method comprising:
inserting a cable into a housing in a first direction;
feeding the cable into the housing and past at least one grip;
rotating the at least one grip about the cable in an unlocked state of the cable;
moving the cable to a locked position in which the cable is restrained from motion
in a second direction substantially opposite the first direction; and
rotating the cable with respect to the housing in the locked position of the cable.

As described in greater detail in the present application as originally filed, some embodiments of the present invention provide a cable lock and a method of locking a cable lock in which a cable inserted or insertable in a first direction in a housing is restrained from moving in a substantially opposite second direction by a grip, wherein the grip is movable about the passage through which the cable is passed (amended claim 31) or is rotatable about the cable (amended claim 45) in an unlocked state of the cable, and wherein the cable is rotatable relative to the housing in a locked state of the cable.

In contrast, Bystry and Van Gompel both disclose balls 38, 39, 40 retained by a truncated conical member 33 or retainer 37 and movable into engagement with and between a cable 17, 27

and a conical internal wall of a body member 13 or locking case 26. As discussed with the Examiner in the January 25, 2005 Examiner's Interview, when the ball 38, 39, 40 is thus engaged, the cable 17, 27 is not freely rotatable within the body member 13 or locking case 26. In this regard, the inventors wish to point out that this type of engagement is common to a number of conventional cable seals, and results in a relationship in which the ball(s) 38, 39, 40 resist movement or rotation due to the high amount of pressure concentrated between the ball(s) 38, 39, 40 and the internal wall of the body member 13 or locking case 26. Indeed, Van Gompel teaches *away* from the claimed invention by describing that the conical internal wall generating this engagement "prevents the balls from rolling around the inner surface of the triangular shaped portion toward the end 34" of the locking case 26. See Van Gompel, column 4, lines 32-38 (emphasis added). Naturally, therefore, Bystry fails to teach, describe, or suggest that the ball 38 in the similar Bystry device is rotatable (e.g., with the cable 17) once the cable 17 is placed in a locked position as shown in FIG. 5.

Also in contrast to the cable lock and method claimed in amended claims 31 and 45, Kueznel discloses the use of balls (see FIG. 2) and rollers 64 (see FIGS. 3, 4, 6, and 9-12), each of which is fixed by a spring in a respective position about the circumference of the cable or bolt. Therefore, the balls and rollers 64 disclosed by Kueznel are incapable of moving about a passage through which a cable is received as claimed in amended claim 31, and is incapable of rotating about a cable as claimed in amended claim 45 – whether in an unlocked state of the cable or otherwise.

As discussed with the Examiner in the January 25, 2005 Examiner's Interview, Bystry, Van Gompel, and Kueznel each utilize elements that are incapable of rotating or otherwise moving about the cable (or cable passage) when the cable is in an unlocked state as claimed in amended claims 31 and 45. Bystry, Van Gompel, and Kueznel also fail to disclose or suggest the desirability of this relationship between such elements.

Accordingly, and for other reasons not discussed herein, the Applicant respectfully requests withdrawal of the 35 U.S.C. §102(b) and §102(e) rejections of amended claims 31 and 45. Claims 33-38 and 41-44, and claims 46-52 are each ultimately dependent upon independent claims 31 and 45, respectively, and are allowable based upon amended claims 31 and 45 and

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upon other features and elements claimed in claims 33-38, 41-44, and 46-52 but not discussed herein.

In view of the above amendments and remarks, the Applicant respectfully submits that the claims are patentably distinct over the prior art, that all the rejections to the claims have been overcome, and that the application is in condition for allowance. Entry of this Amendment is therefore requested. If any issues remain outstanding upon entry of this Amendment, the Examiner is respectfully requested to telephone the undersigned Applicant's Representative at (414) 225-8266.

Respectfully submitted,

RY

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